

split
Work Order ID 142136-2

142136

Page 1

February 29, 2016 10:41:48 AM

Item ID: D412-630-034 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Folding Heli-Access-Step™ RH - Low, High & Float Gear
 Start Date: Mar 19 3/7/2016 Start Qty: 4.00 *4* Cust Item ID:
 Required Date: 4/15/2016 Req'd Qty: 4.00 *4* Customer:
 Reference:

Approvals: Process Plan: Set Date: 20160307 Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
IIN D412-630	Rev N

100	Document Control	0.00	DAS	21	9-89	3x	DAS	28	9-89	FEB 14 2017
100	DOCUMENT CONTROL									
DC	Memo	0.00								
Doc. Control -USB or Paperwork	Photocopy bluefile & create labels per PPP D412-630-034 CHG004									

CHG005 per ECN16601

110	Small Fab	0.00				3x				17/2/10
110	Small Fab									
Small Fab	Memo	0.02								
Small Fab	Assemble as per dwg D412-630 p.14									
	Coat all hardware with LPS3 rust inhibitor									
	A/R LPS3 batch: 123737									
	COAT exposed HARDWARE WITH LPS PROCYON									
	A/R LPS PROCYON BATCH: 133690									

NOTE: change NAS151SH3 on
 D2803.042 + D2804.042
 to D3672-15 per ECN16601

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Item ID: D412-630-034

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Folding Heli-Access-Step™ RH - Low, High & Float Gear

Start Date: 3/7/2016 Start Qty: 4.00

4

Cust Item ID:

Required Date: 4/15/2016 Req'd Qty: 4.00

4

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start

NR1

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120 *120* QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 0.00				<u>3</u>			
130 *130* Packaging Packaging	Pick Kit Memo	0.00 0.00				<u>3/</u>			
140 *140* QC Quality Control	QC4- 100% Inspect kits for completeness Memo	0.00 0.00				<u>3x</u>			

FEB 13 2017

APR 30 2016

FEB 14 2017

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Item ID: D412-630-034**Accept*****N900040100*****Setup Start*****NS1*****Revision ID:****Stop*****NS2*****Item Name:** Folding Heli-Access-Step™ RH - Low, High & Float Gear**Start Date:** 3/7/2016 **Start Qty:** 4.00***4*****Cust Item ID:****Required Date:** 4/15/2016 **Req'd Qty:** 4.00***4*****Customer:****Reference:**

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____
QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Run Start***NR1*****Stop*****NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150	Packaging	0.00							
150									
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP D412-630-034 Location: _____ PPP Rev: _____								
160	QC21- Final Inspection - Work Order Release	0.00							
160									
QC	Memo	0.01							
Quality Control									

DAS
27
9-89

FEB 15 2017

DAS
21
9-89

FEB 15 2017

DAS
21
9-89

FEB 15 2017

Picklist Print

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Work Order ID: 142136

142136

Parent Item: D412-630-034

D412-630-034

Parent Item Name: Folding Heli-Access-Step™ RH - Low, High & Float Gear

Start Date: 3/7/2016

Required Date: 4/15/2016

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP Rev:A New Issue 06-11-08 JLM
 IPP rev B ecn1019, added D2807-041 EC verified by:DD
 IPP rev :C 11.01.06 added route seq ID DD vef:EC IPP REV:D
 13.06.07 PER CHG004 DD vef:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
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AN310C8

Purchased

No

110

Each

36.0000

2

8

AN310C8

Nut

**

Location

Loc Qty

Loc Code

CCK006

20

m132677

20

ST331

16

m132640

16

AN3C21A

Purchased

No

110

Each

47.0000

2

8

AN3C21A

Bolt

**

Location

Loc Qty

Loc Code

OVER002

25

M133686

25

ST348

22

M132617

2

M133640

20

APR 21 2016

DAS
6
9-89

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Work Order ID: 142136

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Parent Item: D412-630-034

D412-630-034

Parent Item Name: Folding Heli-Access-Step™ RH - Low, High & Float Gear

Start Date: 3/7/2016

Required Date: 4/15/2016

Start Qty: 4.00

Required Qty: 4.00

AN8C16

Purchased No

110

Each

71.0000

2

8

AN8C16

Bolt

DAS
8
9-89

Location

Loc Qty

Loc Code

over005

56

131651

7

M132522

7

M132674

7

M133091

7

M133336

7

M133920

7

M133921

7

M134131

7

ST332

15

M130460

14

M131367

1

D2012-107

Manufactured No

110

Each

11.0000

1

4

D2012-107

Clevis

DAS
8
9-89

Location

Loc Qty

Loc Code

WA004

11

138845

11

D2803-042

Manufactured No

110

Each

17.0000

1

4

D2803-042

Bracket Assembly

DAS
6
9-89

Location

Loc Qty

Loc Code

ST473

17

119582

3

120059

10

127261

4

DAS
8
9-89

APR 21 2016

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Work Order ID: 142136

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Parent Item: D412-630-034

D412-630-034

Parent Item Name: Folding Heli-Access-Step™ RH - Low, High & Float Gear

Start Date: 3/7/2016

Required Date: 4/15/2016

Start Qty: 4.00

Required Qty: 4.00

D2804-042

Manufactured No

110

Each

9.0000

1

4

D2804-042

RH Step Fwd Bracket

Location

Loc Qty

Loc Code

ST475

9

119408

2

124214

7

DAS
8
9-89

D2807-041

Manufactured No

110

Each

16.0000

2

8

D2807-041

Prop Assembly

Location

Loc Qty

Loc Code

FG

3

89606

3

ST010

13

130465

3

140752

10

DAS
8
9-89

D2813

Manufactured No

110

Each

17.0000

2

8

D2813

Washer

Location

Loc Qty

Loc Code

ST011

17

124271

17

DAS
8
9-89

D3395-1

Manufactured No

110

Each

22.0000

4

16

D3395-1

Bushing

Location

Loc Qty

Loc Code

ST034

22

133522

1

134014

21

DAS
8
9-89

AKK 21 JUN 16

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Work Order ID: 142136

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Parent Item: D412-630-034

D412-630-034

Parent Item Name: Folding Heli-Access-Step™ RH - Low, High & Float Gear

Start Date: 3/7/2016

Required Date: 4/15/2016

Start Qty: 4.00

Required Qty: 4.00

D3562-042

Manufactured No

110

Each

0.0000

1

4

D3562-042

Step Weldment

MS21043-3

Purchased No

110

Each

989.0000

4

16

MS21043-3

Nut

154024 (32) **

17/02/09 DAS 36 9-89

Location

Loc Qty

Loc Code

FG	80
103691	80
FP001	11
m130673	11
GA	39
m130673	15
m131677	24
OVER007	400
m133990	400
ST302	328
m133577	328
ST304	106
m131340	106
ST308	25
m132551	25

110

Each

44.0000

2

8

MS24665-302

Purchased No

MS24665-302

Cotter Pin

**

17/02/10 DAS 36 9-89

Location

Loc Qty

Loc Code

GA	17
120521	17
ST288	27
m127305	27

(8) 8

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Work Order ID: 142136

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Parent Item: D412-630-034

D412-630-034

Parent Item Name: Folding Heli-Access-Step™ RH - Low, High & Float Gear

Start Date: 3/7/2016

Required Date: 4/15/2016

Start Qty: 4.00

Required Qty: 4.00

MS24693-C280

Purchased

No

110

Each

44.0000

2

8

MS24693-C280

SCREW

**

DAS

8

9-89

Location

Loc Qty

Loc Code

ST287

44

m131624

44

NAS1515H3

Purchased

No

110

Each

346.0000

6

24

NAS1515H3

Washer

**

DAS

8

9-89

Location

Loc Qty

Loc Code

FG

10

123301

10

GA

38

m129521

38

ST266

298

m128635

7

m131697

291

NAS1515H5L

Purchased

No

110

Each

210.0000

4

16

NAS1515H5L

Washer

**

DAS

8

9-89

Location

Loc Qty

Loc Code

FG

40

103691

40

ST265

167

M133316

167

ST266

3

M130466

3

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Work Order ID: 142136

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Parent Item: D412-630-034

D412-630-034

Parent Item Name: Folding Heli-Access-Step™ RH - Low, High & Float Gear

Start Date: 3/7/2016

Required Date: 4/15/2016

Start Qty: 4.00

Required Qty: 4.00

NAS1515H8

Purchased No

110 Each

25.0000 4 16

NAS1515H8

Washer

**

DAS

8-89

Location

Loc Qty

Loc Code

ST265

25

m131001

25

Each

7.0000

1

4

**

APR 21 2016

AN44C7A

Purchased No

AN44C7A

Eyebolt

Location

Loc Qty

Loc Code

ST339

7

m132677

7

Each

13.0000

1

4

**

DAS

27

9-89

AN4C10A

Purchased No

AN4C10A

BOLT

Location

Loc Qty

Loc Code

ST345

13

M129521 1x

1

M131153 2x

12

DAS

27

9-89

APR 30 2016

MS24693-C285

M135704

3x

17/02/10

DAS
36
9-89

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Work Order ID: 142136

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Parent Item: D412-630-034

D412-630-034

Parent Item Name: Folding Heli-Access-Step™ RH - Low, High & Float Gear

Start Date: 3/7/2016

Required Date: 4/15/2016

Start Qty: 4.00

Required Qty: 4.00

AN4C15A

Purchased No

130 Each

94.0000

2 8

AN4C15A

Bolt

**

Location

Loc Qty

Loc Code

FG 10

120360 10

OVER002 50

M132763 20

M133485 30

ST312A 16

M131377 16

ST343 18

M132823 18

DAS

0

9-89

DAS
27
9-89

DAS
28
9-89

AN4C6A

Purchased No

130 Each

309.0000

1 4

AN4C6A

Bolt

**

Location

Loc Qty

Loc Code

FG 14

103344 4

121657 10

OVER002 200

m133990 200

ST345 95

m131410 1

m133515 94

DAS

0

9-89

DAS
27
9-89

DAS
28
9-89

AN5C15A

Purchased No

130 Each

39.0000

2 8

AN5C15A

Bolt

**

Location

Loc Qty

Loc Code

286a 39

M130466 39

DAS

0

9-89

DAS
27
9-89

DAS
28
9-89

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Work Order ID: 142136

142136

Parent Item: D412-630-034

D412-630-034

Parent Item Name: Folding Heli-Access-Step™ RH - Low, High & Float Gear

Start Date: 3/7/2016

Required Date: 4/15/2016

Start Qty: 4.00

Required Qty: 4.00

D2806-1

Manufactured No

130

Each

17.0000

2 8

D2806-1

Bushing

**

DAS
27
9-89

Location

Loc Qty

Loc Code

ST011

7

133437 3X

7

ST012a

10

133945 3X

10

Manufactured No

130

Each

24.0000

2 8

D2806-3

D2806-3

Bushing

**

DAS
27
9-89

Location

Loc Qty

Loc Code

ST010

24

134007 2X

8

136702

16

Manufactured No

130

Each

10.0000

1 4

D2810-5

D2810-5

Strut

**

DAS
27
9-89

Location

Loc Qty

Loc Code

ST377

10

124237

5

134899

5

Manufactured No

130

Each

9.0000

2 8

D3396-1

D3396-1

Spacer

**

DAS
27
9-89

Location

Loc Qty

Loc Code

ST034

9

107894

90

DAS
28
9-89

DAS
27
9-89

APR 30 2016

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Work Order ID: 142136

142136

Parent Item: D412-630-034

D412-630-034

Parent Item Name: Folding Heli-Access-Step™ RH - Low, High & Float Gear

Start Date: 3/7/2016

Required Date: 4/15/2016

Start Qty: 4.00

Required Qty: 4.00

MS21043-4

Purchased

No

130

Each

1,021.000

4 16

MS21043-4

Nut

DAS
28
9-89

Location

Loc Qty

Loc Code

FG

40

104603

40

GA

206

m132803

206

ST302

300

m134249

300

ST32

475

m133769

475

MS21043-5

Purchased

No

130

Each

172.0000

3 12

MS21043-5

Nut

DAS
28
9-89

Location

Loc Qty

Loc Code

FG

20

101418

20

GA

76

116548

76

ST302

76

m132382

76

NAS1515H4

Purchased

No

130

Each

52.0000

7 28

NAS1515H4

Washer

D3672-17
ECN16601
✓

DAS
28
9-89

Location

Loc Qty

Loc Code

ST266

52

m129499

52

**

150866

DAS
6
9-89

FEB 13 2017

APR 30 2016

DAS
27
9-89

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Work Order ID: 142136

142136

Parent Item: D412-630-034

D412-630-034

Parent Item Name: Folding Heli-Access-Step™ RH - Low, High & Float Gear

Start Date: 3/7/2016

Required Date: 4/15/2016

Start Qty: 4.00

Required Qty: 4.00

NAS1515H5

Purchased

No

130

Each

118.0000

7

28

NAS1515H5

Washer

**

50354

DAS
6
9-89

FEB 13 2017

DAS
27
9-89

APR 3 2 2016

D3672-5
per SLN16-601

DAS
28
9-89

Location

FG

103691

ST266

m130783

Loc Qty

40

40

78

78

Loc Code

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Qty -033	Qty -034	Qty -243	Qty -244	Part Number	Description
X				D412-630-033	HELI-ACCESS-STEP™ LH (FOLDING)
	X			D412-630-034	HELI-ACCESS-STEP™ RH (FOLDING)
1		X		D412-630-243	STEP ASSEMBLY LH
	1		X	D412-630-244	STEP ASSEMBLY RH
		1	1	D2012-107	CLEVIS
		1		D2803-041	STA 84 BRACKET ASSEMBLY LH
			1	D2803-042	STA 84 BRACKET ASSEMBLY RH
		1		D2804-041	STA 155 BRACKET ASSEMBLY LH
			1	D2804-042	STA 155 BRACKET ASSEMBLY RH
2	2			D2806-1	BUSHING
2	2			D2806-3	BUSHING
		2	2	D2807-041	GAS SPRING ASSEMBLY (WAS D2807)
1	1			D2810-5	STRUT
		2	2	D2813	WASHER
		1		D3562-041	STEP WELDMENT LH
			1	D3562-042	STEP WELDMENT RH
		4	4	D3395-1	BUSHING
2	2			D3396-1	SPACER
7	7			D3672-5	WASHER (OR NAS1515H5)
		4	4	D3672-7	WASHER (OR NAS1515H5L)
		5	5	D3672-15	WASHER (OR NAS1515H3)
7	7			D3672-17	WASHER (OR NAS1515H4)
		4	4	D3672-19	WASHER (OR NAS1515H8)
		1	1	AN3C21A	BOLT
1	1			AN4C6A	BOLT
1	1			AN4C10A	BOLT
2	2			AN4C15A	BOLT
1	1			AN44-C7A	EYEBOLT
2	2			AN5C15A	BOLT
		2	2	AN8C16	BOLT
		2	2	AN310C8	NUT
		2	2	MS24665-302	COTTER PIN (OR AN380C3-4)
		4	4	MS21043-3	NUT
4	4			MS21043-4	NUT
3	3			MS21043-5	NUT
		2	2	MS24693-C280	SCREW (OR MS24694-C65)
		1	1	MS24693-C285	SCREW (OR MS24694-C76)

ENGINEERING CHANGE NOTICE **DART AEROSPACE LTD**

Date: 16.06.22	Job No.: ENG7105JUNE	ADR Yes/No: N	ADR Date: N/A	ECN #: 16- 601
Product No.: D412-630		Created By: [Signature]	Approved By: [Signature]	
Product Name: HELI-ACCESS-STEP		Checked By: [Signature]		

Distribution	Reqd	Resp	Initial / Date (YY/MM/DD)
Director of Operations	N	DM	
Production Manager / Coord.	Y	MP / MF	MF 16-6-23
Purchasing Manager / Purchasing Coord.	Y	LL / CL	LL 16.06.23
Production Engineering Coord.	Y	DD / JLM	DD 16.06.23
Production Engineering Coord.	N	DL	
Customer Order Processing	N	SL / BG	

Distribution	Reqd	Resp	Initial / Date (YY/MM/DD)
DQA / QA Coord.	Y	PS / ED	PS 16.06.23
QC Coordinator	Y	PD	PD 16.06.23
Customer Support	Y	SW / LM	SW 16.06.23
Customer Technical Support	Y	MB / HS	MB 16.06.23
Marketing	Y	SL / WR	SL 16.06.23
Dist. Management Coord.	Y	HM	HM 16.06.23

Reason for Change:
INSTRUCTIONS CLARIFIED FOR OPERATORS INSTALLING D412-630-031/-032/-033/-034 SIMULTANEOUSLY. NAS1515 WASHERS REPLACED BY D3672.

Documents Affected:
RELEASE D412-630 REV. O, ICA-D412-630 REV. 6, D3562 REV. G (REF. PAR16-517), D3672 REV. D, D2803 REV. C, AND D2804 REV. D

IF APPLICABLE: NCR: _____ PAR: 16-499 CAR: _____ CIR: _____ URF: _____

PAPERWORK UPDATE ☒ PARTS MUST COMPLY ☒ PREVIOUS PARTS SATISFACTORY ☐

#	Quality Assurance Actions	Reqd	Resp	Notes	Complete
1	Notify Previous Customers	Y	MB	PROVIDE BHTC WITH IIN/ICA	16.06.22
2	Notify Eurocopter France	N			
3	Notify Augusta Westland	N			
4	Manufacturing Licensing Agreement Update	N			

#	Engineering Actions	Reqd	Resp	Notes	Complete
5	Required Documents/Drawings/Item ID's Under Review (URF)	N			
6	Update Master Document List (MDL)	Y	MB	MDL-D412-630 REV. R	16.06.22
7	Update Document Record (DR)	N			
8	Update Product Compatibility Matrix	N			
9	Notify TC / FAA of Change (eg. ICA, 8110-3)	N			
10					

#	Document Control Actions	Reqd	Resp	Notes	Complete
11	Move / Update Electronic Files / Design Journal	Y	KJ		16.06.23
12	Update Product Specification Files (Bluefiles)	Y	KJ		16.06.23
13	Update Approved/Preliminary Dwg PDF Files	Y	KJ		16.06.23
14	Update Product Development Summary (STC applications)	N			
15	Update QSI 021 (TC/FAA STC) and/or STC Approval List	N			
16	Create/Update Parts / STC Database	Y	KJ	SEE ITEM C BELOW.	16.06.23
17	Update / Verify Airworthiness Release Certificate Database	Y	KJ		16.06.23
18	Create / Update Change Record Form / Item Card Database	Y	KJ	SEE ITEM A BELOW.	16.06.23
19	Create / Update Packaging Process Plan (PPP)	Y	KJ		16.06.23
20	Red Decals required on Packaging Process Plan (PPP)?	Y	KJ		16.06.23
21	Update Controlled Supplier Documents (Qpulse) Database	N			
22	Update Grey Project Binder / Electronic Project Folder	Y	KJ		16.06.23
23	Update D-Part / M-Drawing / DSI / DEO Master Binders	Y	KJ		16.06.23
24	Update "Royalty Paid to" attribute (Parts sold under Dart USA STC's)	N			
25					

Description / Action:
A) - D412-630-011/-012 NOW AT CHG 008
- D412-630-013/-014 NOW AT CHG 007
- D412-630-023/-024/-033/-034 NOW AT CHG 005
- D412-630-031/-032 NOW AT CHG 004
B) UPDATE ROUTES, BOMs AND W/Os ACCORDINGLY.
C) NEW PARTS: D3672-15/-17/-19. ENTER IN SYSTEM, CREATE ROUTES, BOMs, AND W/Os. PLACE PO WITH SUPPLIER AND STOCK PARTS.
D) REWORK D2803-1/-2/-041/-042/-043/-044 AND D2804-1/-2/-041/-042/-043/-044 IN STOCK/WIP TO D2803 REV. C AND D2804 REV. D.

ECN Verified & Complete: [Signature] Date: JUN 27 2016

DQA: _____ Date: _____

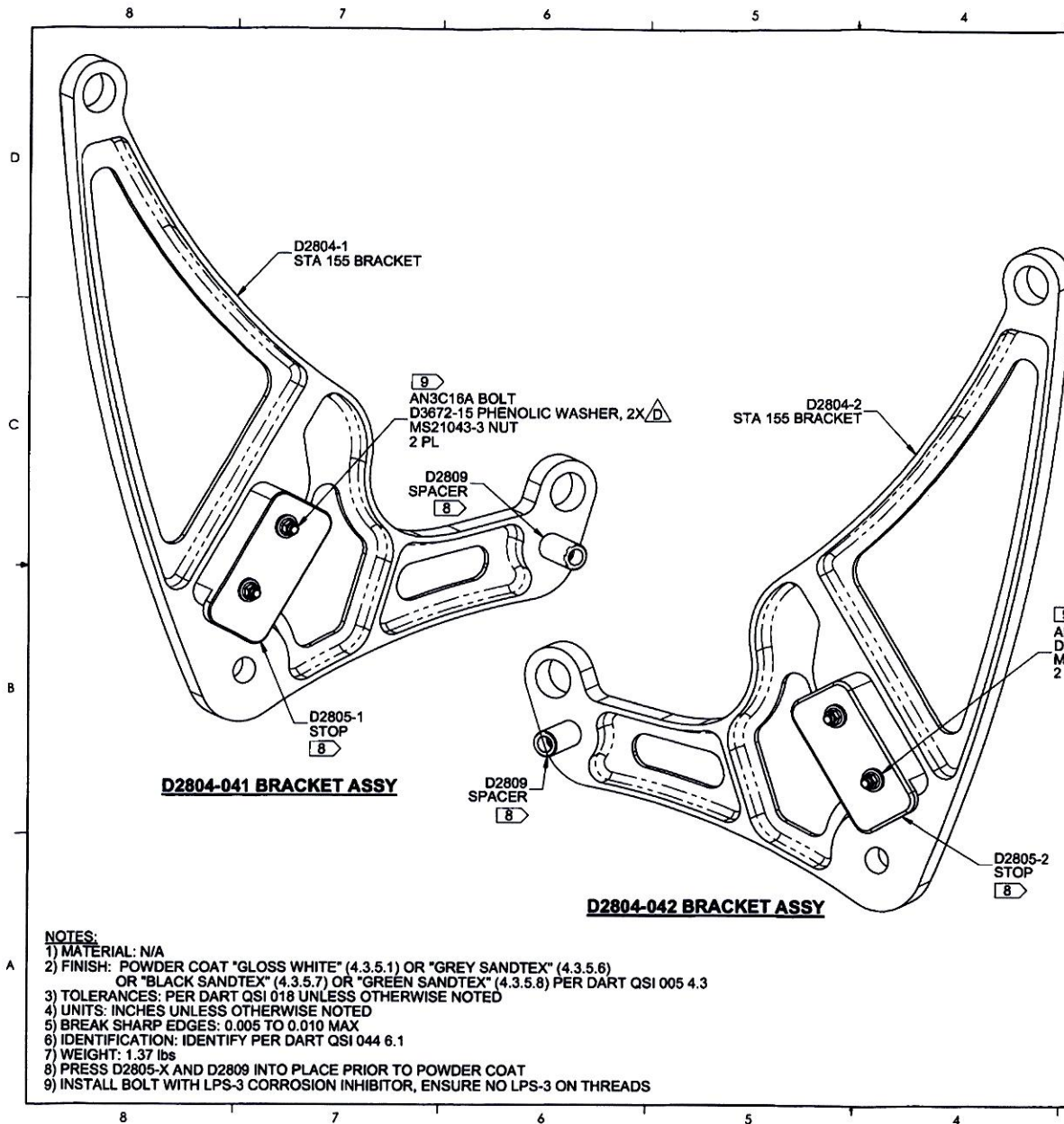


WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					



ITEM	QTY -041	QTY -042	P/N	DESCRIPTION
	X		D2804-041	BRACKET ASSY
		X	D2804-042	BRACKET ASSY
1	1		D2804-1	STA 155 BRACKET
2		1	D2804-2	STA 155 BRACKET
3	1		D2805-1	STOP
4		1	D2805-2	STOP
5	1	1	D2809	SPACER
6	4	4	D3672-15	PHENOLIC WASHER
7	2	2	AN3C16A	BOLT
8	2	2	MS21043-3	NUT, SELF-LOCKING

△
△

RELEASED

2016 JUN 22 of
EKN 16-661

D	REVISE TO CURRENT FORMAT: D3672-15 WAS NAS1615H3; MS21043-3 WAS MS21042-3; ADD CSINK (SECTIONS E-E AND J-J) REF: PAR16-499, D6-3/-4: 2.656 WAS 2.654 REASON: CAD ERROR.	MB	16.04.11
C	CHANGE GEOMETRY TO ADD CLEARANCE	CP	06.10.16
B	ADD CUTOUTS AND -043/-044	CP	04.11.22
A	NEW ISSUE	CP	00.11.07
REV.	DESCRIPTION	BY	DATE
DESIGN	CP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	MB		
CHECKED	ML	DRAWING NO.	REV. D
MFG. APPR.	JLM	D2804	SHEET 1 OF 4
APPROVED	WM	TITLE	SCALE
DE APPR.	DS	STA 155 BRACKET	NTS
DATE	16.04.11	COPYRIGHT © 2000 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

APPROVED

- NOTES:**
- 1) MATERIAL: N/A
 - 2) FINISH: POWDER COAT "GLOSS WHITE" (4.3.5.1) OR "GREY SANDTEX" (4.3.5.6) OR "BLACK SANDTEX" (4.3.5.7) OR "GREEN SANDTEX" (4.3.5.8) PER DART QSI 005 4.3
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: IDENTIFY PER DART QSI 044 6.1
 - 7) WEIGHT: 1.37 lbs
 - 8) PRESS D2805-X AND D2809 INTO PLACE PRIOR TO POWDER COAT
 - 9) INSTALL BOLT WITH LPS-3 CORROSION INHIBITOR, ENSURE NO LPS-3 ON THREADS

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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Date :		Step #:		QTY Effective :			MRB (QS1042) Approval																		
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																	
Root Cause		FAULT CATEGORY																							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐		Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐		Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐		Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐																	
		OTHER : ☐																							

Qty -033	Qty -034	Qty -243	Qty -244	Part Number	Description
X				D412-630-033	HELI-ACCESS-STEP™ LH (FOLDING)
	X			D412-630-034	HELI-ACCESS-STEP™ RH (FOLDING)
1		X		D412-630-243	STEP ASSEMBLY LH
	1		X	D412-630-244	STEP ASSEMBLY RH
		1	1	D2012-107	CLEVIS
		1		D2803-041	STA 84 BRACKET ASSEMBLY LH
			1	D2803-042	STA 84 BRACKET ASSEMBLY RH
		1		D2804-041	STA 155 BRACKET ASSEMBLY LH
			1	D2804-042	STA 155 BRACKET ASSEMBLY RH
2	2			D2806-1	BUSHING
2	2			D2806-3	BUSHING
		2	2	D2807-041	GAS SPRING ASSEMBLY (WAS D2807)
1	1			D2810-5	STRUT
		2	2	D2813	WASHER
		1		D3562-041	STEP WELDMENT LH
			1	D3562-042	STEP WELDMENT RH
		4	4	D3395-1	BUSHING
2	2			D3396-1	SPACER
7	7			D3672-5	WASHER (OR NAS1515H5)
		4	4	D3672-7	WASHER (OR NAS1515H5L)
		5	5	D3672-15	WASHER (OR NAS1515H3)
7	7			D3672-17	WASHER (OR NAS1515H4)
		4	4	D3672-19	WASHER (OR NAS1515H8)
		1	1	AN3C21A	BOLT
1	1			AN4C6A	BOLT
1	1			AN4C10A	BOLT
2	2			AN4C15A	BOLT
1	1			AN4C7A	EYEBOLT
2	2			AN5C15A	BOLT
		2	2	AN8C16	BOLT
		2	2	AN310C8	NUT
		2	2	MS24665-302	COTTER PIN (OR AN380C3-4)
		4	4	MS21043-3	NUT
4	4			MS21043-4	NUT
3	3			MS21043-5	NUT
		2	2	MS24693-C280	SCREW (OR MS24694-C65)
		1	1	MS24693-C285	SCREW (OR MS24694-C76)

February 29, 2016 10:41:48 AM

Item ID: D412-630-034

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Folding, Heli-Access-Step™ RH - Low, High & Float Gear

Start Date: ~~3/7/2016~~ **Start Qty:** 4.00

4

Cust Item ID:

Required Date: 4/15/2016 Req'd Qty: 4.00

4

Customer:

Reference:

Run . Start *NR1*

Approvals: **Process Plan:**

Date: 20100508 **Tooling:**

Date: _____

Stop *NR2*

QC: _____

Date: _____ **SPC (Y/N):** _____

Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
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IIN D412-630

Rev N

100	Document Control	0.00
100	DOCUMENT CONTROL	
DC	Memo	0.00
Doc.Control -USB or Paperwork	Photocopy bluefile & create labels per PPP D412-630-034 CHG004	

MCS MAY 02 2016

110 0.00

110

Small Fab

Small Fab

Small Fab

Memo

Assemble as per dwg D412-630 p.14
Coat all hardware with LPS3 rust inhibitor
A/R LPS3 batch: _____
COAT exposed HARDWARE WITH LPS PROCYON .
A/R LPS PROCYON BATCH: _____